

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:
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PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing
(day/month/year) **05 JULY 2005 (05.07.2005)**

Applicant's or agent's file reference
05FLWW028

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/KR2005/001268

International filing date (day/month/year)

02 MAY 2005 (02.05.2005)

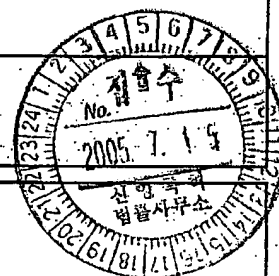
Priority date(day/month/year)

03 MAY 2004 (03.05.2004)

International Patent Classification (IPC) or both national classification and IPC

IPC7 D06F 33/02

Applicant

LG ELECTRONICS, INC. et al

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application



2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

<p>Name and mailing address of the ISA/KR</p> <p> Korean Intellectual Property Office 920 Dunsan-dong, Seo-gu, Daejeon 302-701, Republic of Korea</p> <p>Facsimile No. 82-42-472-7140</p>	<p>Date of completion of this opinion</p> <p>04 JULY 2005 (04.07.2005)</p>	<p>Authorized officer</p> <p>JEON, Yong Hai</p> <p>Telephone No. 82-42-481-5657</p> <p></p>
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International application No.

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Box No. 1 Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material
☐ on paper
☐ in electronic form
 - c. time of filing/furnishing
☐ contained in the international application as filed.
☐ filed together with the international application in electronic form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

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Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-17	YES
	Claims	None	NO
Inventive step (IS)	Claims	2-4, 6-17	YES
	Claims	1, 5	NO
Industrial applicability (IA)	Claims	1-17	YES
	Claims	None	NO

2. Citations and explanations :

Reference is made to the following document:

D: JP 2001-029682 A

Novelty

For Claims 1-4: None of the available prior art describes a drum type washing machine with a microcomputer controlling a preliminary spin drying operation to be selectively performed based on the comparison result obtained by comparing a measured laundry quantity and a measured eccentricity with the reference quantity value and the reference eccentricity value.

So claim 1 is new and said claimed invention is novel since the said drum type washing machine is not disclosed by the prior art. Dependent Claims 2-4 also appear to be novel.

Consequently Claims 1-4 comply with Article 33(2) PCT.

For Claims 5-14: None of the available prior art describes a controlling method of a drum type washing machine having a step of controlling a preliminary spin drying operation to be selectively performed based on the measured laundry quantity and the measured eccentricity.

So claim 5 is new and said claimed invention is novel since the said controlling method of a drum type washing machine is not disclosed by the prior art. Dependent Claims 6-14 also appear to be novel.

Consequently Claims 6-14 comply with Article 33(2) PCT.

For Claims 15-17: None of the available prior art describes a controlling method of a drum type washing machine having a step of performing an eccentricity measurement operation based on the measured laundry quantity; if the measured laundry quantity is smaller than a reference quantity value and the measure eccentricity is smaller than a reference eccentricity value, performing a main spin drying operation without performing a preliminary spin drying operation. So claim 15 is new and said claimed invention is novel since the said drum type washing machine is not disclosed by the prior art. Dependent claims 16 and 17 also appear to be novel. Consequently Claims 15-17 comply with Article 33(2) PCT.

See the supplemental box.

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Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of:

Box No. V. 2. Citation and explanations

Inventive Step

For Claim 1: D does not exactly disclose the same drum type washing machine of claim 1. But D discloses a washing machine comprising: a drum 3; a motor 10; an operation unit 40; a RAM 38; a ROM 37; and a microcomputer controlling washing, rinsing and dehydration.

Although a microcomputer controlling a preliminary spin drying operation to be selectively performed based on a comparison result obtained by comparing a measured laundry quantity and a measured eccentricity with the reference quantity value and the reference eccentricity value is not explicitly specified in D, D suggests a dehydration which is operated according to the measured eccentricity by uneven existence of the laundry. So the invention in claim 1 could be derived by a person skilled in the art, if necessary, by a simple design change or repeated experiments. Therefore claim 1 would be obvious for the skilled person and the invention of claim 1 is not considered to involve an inventive step. Consequently claim 1 does not fulfil the requirements of Article 33(3) PCT.

For Claims 5: D does not exactly disclose the same controlling method of a drum type washing machine of claim 5. But D discloses a dehydration which is operated according to the measured eccentricity by the uneven existence of the laundry. So the invention in claim 5 could be derived by a person skilled in the art, if necessary, by a simple design change or repeated experiments. Therefore claim 5 would be obvious for the skilled person and the invention of claim 5 is not considered to involve an inventive step. Consequently claim 5 does not fulfil the requirements of Article 33(3) PCT.

Industrial Applicability

The inventions of Claims 1-17 are industrially applicable.

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